

# MONTHLY WEATHER REVIEW.

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The MONTHLY WEATHER REVIEW summarizes the current manuscript data received from about 3,500 land stations in the United States and about 1,250 ocean vessels; it also gives the general results of the study of daily weather maps based on telegrams or cablegrams from about 200 North American and 40 European, Asiatic, and oceanic stations.

The hearty interest shown by all observers and correspondents is gratefully recognized.

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As far as practicable the time of the seventy-fifth meridian is used in the text of the MONTHLY WEATHER REVIEW.

Barometric pressures, both at land stations and on ocean vessels, whether station pressures or sea-level pressures, are reduced, or assumed to be reduced, to standard gravity, as well as corrected for all instrumental peculiarities, so that they express pressure in the standard international system of measures, namely, by the height of an equivalent column of mercury at 32° Fahrenheit, under the standard force, i. e., apparent gravity at sea level and latitude 45°.

## FORECASTS AND WARNINGS.

By Prof. E. B. GARRIOTT, in charge of Forecast Division.

Pressure distribution over the Northern Hemisphere during the month was not sufficiently stable to permit of any definite forecasts of the weather beyond the usual period of two days. The type, while of the early winter character, was poorly defined, resulting in generally unsettled weather thruout the United States, but without well-developed storms over the eastern and southern districts. The British Islands and continental Europe were also unusually free from storms and there were but two, both over the extreme northern districts, that were in any manner worthy of notice. Over Siberia the pressure was characterized by rapid fluctuations, in keeping with the disturbed conditions that were prevalent over the United States.

The principal weather feature of the month was the continuance of the drought over the eastern portion of the country, and in some sections the month was the driest on record. This was particularly true of the Middle Atlantic States.

The first half of the month was generally cold with freezing weather at times in the interior of the South Atlantic and Gulf States, and temperatures below zero in the middle and northern Rocky Mountain districts. A disturbance from the Caribbean Sea, that recurved to the northeastward over western Cuba during the 3d, reached Bermuda on the morning of the 5th with greatly increased development. The high area following from the interior of the United States moved well to the southward with the result that frost warnings issued on the morning of the 5th for the Southern States, including extreme northern Florida, were fully verified. A disturbance moved northward along the Atlantic coast during the 14th and 15th, attended by rains in the Gulf and South Atlantic States and the first general snow of the season in the Middle and North Atlantic States. This storm was also followed by frost in the South, reaching into northern Florida on the 16th and 17th. Warm weather set in from the northwest on the 16th and 17th, extending over the central valleys and Atlantic States on the 17th and 18th, and after this time there was no cold weather of consequence. From the 20th to the 26th two dis-

turbances moved southeastward along the Rocky Mountain slope, turned sharply northeastward after reaching the thirty-fifth parallel, and then moved beyond Lake Superior with greatly increased energy. These storms were accompanied by widespread rains and snows and high winds, but the high areas following were not accompanied by low temperatures. When the first storm past over Oklahoma on the 23d severe local storms developed over northern Arkansas, resulting in the loss of several lives and the destruction of a considerable amount of property. There were also some severe storms on the day following in portions of Iowa.

### BOSTON FORECAST DISTRICT.\*

[New England.]

The weather of the month was exceptionally pleasant for the season. There were no prolonged severe storms, and the sunshine was much above normal, with an average for the entire district of twelve clear days. The precipitation was below the monthly average at all stations, and the departures ranged from 0.23 of an inch, at Bloomfield, Vt., to 3.90 inches at Bar Harbor, Me. Snow fell in measurable amounts in all the States except Rhode Island, where the total for the month was a trace. The largest monthly fall was 12 inches, at Enosburg, Vt. The temperature was slightly below normal during the first and second decades, and above during the third decade. The only zero temperature in the district was 4° below zero at Van Buren, Me., on the 19th.

Storm warnings were displayed on the 4th, 14th, 15th, 26th, and 30th. There were no storms without warnings.—J. W. Smith, District Forecaster.

### NEW ORLEANS FORECAST DISTRICT.

[Louisiana, Texas, Oklahoma, and Arkansas.]

Warm weather prevailed except during the second decade. Frosts occurred over the northern portion of the district on the 12th and thruout the district on the 14th and 15th, for all of which timely warnings were issued. No severe weather conditions occurred without warnings, and all warnings issued